REMARKS/ARGUMENTS

Amended Claim 1 is supported, for example, at specification page 10, line 2, and specification page 11, line 8. Amended Claim 2 is supported, for example, at original Claim 2.

No new matter is added.

Applicants thank Examiner Cutliff for the helpful and courteous discussion of September 1, 2009, wherein the obviousness rejection, and possible claim amendments and arguments to address the rejection, were discussed.

The objections to Claims 1 and 2 are mooted by the amendment of these claims to, respectively, correct the spelling of the words "present" and "alkyl."

The obviousness rejection of Claims 1-20 as being unpatentable in view of Leppard, Livingston, and Stuebinger is traversed.

Present Claim 1 is drawn to a process for the preparation of acylphosphines of formula (I). The process comprises (1) reacting organic phosphorus halides of formula (II) with sodium in a solvent in the presence of an activator, wherein sodium is present in the form of a dispersion of sodium particles having a mean particle size of $\leq$500 μm in the solvent, and (2) subsequent reaction with acid halides of formula (III). The process is carried out without isolation of the intermediates; the activator is selected from the group consisting of n-butanol, aromatic chlorohydrocarbons, aliphatic chlorohydrocarbons, aromatic bromohydrocarbons, aliphatic bromohydrocarbons, and combinations thereof; and the purity of the acyl phosphine of formula (1) is at least 25%.

Applicants have filed, along with this paper, a declaration under 37 C.F.R. § 1.132.

Livingston is drawn to "preparing an emulsion of finely divided molten particles of an alkali metal in an inert organic liquid in the presence of an emulsifying agent..." (see column 2, lines 4-7 of Livingston). The Office relies upon Livingston to provide "dispersing agents

[that] can be hydroxyl compounds such as n-butanol..." and notes "the sodium and agent are added in a vessel with a pump run at 800 to 900 R.P.M. and at the end of the agitation the dispersion contained sodium particles less than 100 microns (μm)" (see page 6 of the Official Action).

In the Declaration, at pages 1-2, in Comparative Example 1 (NOT of the claimed inventive embodiments), bis-(2,4,6-trimethylbenzoyl)-phenyl phosphine formation was attempted. Stirring speeds ranged from 300 to 1500 rpm and thus, were comparable to Livingston's 800 to 900 rpm pump. As described in the Declaration, analysis of the crude worked-up product showed only a trace (purity ca 1%) of desired reaction product. Thus, the combination of Livingston, Leppard, and Stuebinger, as demonstrated by Comparative Example 1, failed to produce the desired product in any significant amount. As noted in the Declaration at page 4, based on the combined teachings of Livingston, Leppard, and Stuebinger, the almost complete lack of desired compound in the crude reaction product constitutes the secondary consideration of recognition of a problem. Withdrawal of the obviousness rejection is requested on the basis alone.

In contrast to the result of Comparative Example 1, *supra*, in Examples 1 and 2, where high speed turbine stirring was employed, analysis of the crude worked-up product showed significantly improved product presence (purities, respectively, of 25% and 85-90%). As described at Declaration page 4, these product purity results are superior to Comparative Example 1 (NOT of the claimed inventive embodiments, purity ca 1%). Further, based on the teaching of Livingston, Leppard, and Stuebinger, and as shown by Comparative Example 1 (NOT of the claimed inventive embodiments), these superior results are also unexpected results, thus demonstrating the secondary consideration of superior and unexpected results (see Declaration page 4).

Withdrawal of the obviousness rejection is requested on this basis alone.

Finally, the Office, at page 6 of the Official Action, in reference to Livingston, characterizes Livingston as disclosing that "any device can be used for agitation, especially those designed such that a large amount of shear and turbulence are created." Applicants note that the terms "large amount of shear" and "large amount of turbulence" are essentially meaningless terms, as there is no generally agreed upon meaning to these terms, and the terms are facially not quantifiable. Accordingly, the terms must be interpreted with respect to the Examples in Livingston. Example 1 of Livingston, uses an 800 – 900 rpm pump, as described, *supra*. Accordingly, Livingston does not describe or suggest the high speed turbine stirring of Declaration Examples 1 and 2.

Applicants submit the present application is now in condition for allowance. Early notification to this effect is earnestly solicited.

Respectfully submitted,

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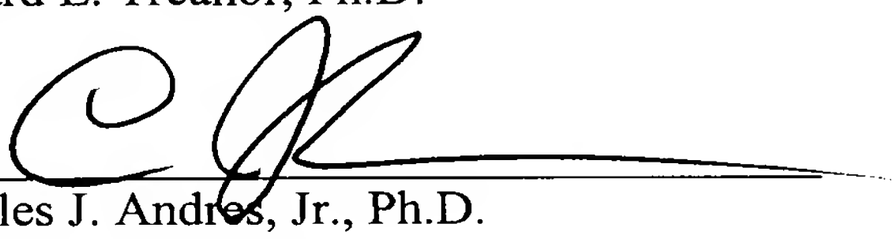

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